

SEQUENCE LISTING

<110> Novartis AG

<120> OCULAR GENE THERAPY

<130> 4-32625

<160> 21

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 183

<212> PRT

<213> Human

<400> 1

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His Ser His Arg Asp Phe Gln Pro Val Leu His Leu Val Ala Leu Asn
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Ser Pro Leu Ser Gly Gly Met Arg Gly Ile Arg Gly Ala Asp Phe Gln
 20      25      30
Cys Phe Gln Gln Ala Arg Ala Val Gly Leu Ala Gly Thr Phe Arg Ala
 35      40      45
Phe Leu Ser Ser Arg Leu Gln Asp Leu Tyr Ser Ile Val Arg Arg Ala
 50      55      60
Asp Arg Ala Ala Val Pro Ile Val Asn Leu Lys Asp Glu Leu Leu Phe
 65      70      75      80
Pro Ser Trp Glu Ala Leu Phe Ser Gly Ser Glu Gly Pro Leu Lys Pro
 85      90      95
Gly Ala Arg Ile Phe Ser Phe Asp Gly Lys Asp Val Leu Arg His Pro
100      105      110
Thr Trp Pro Gln Lys Ser Val Trp His Gly Ser Asp Pro Asn Gly Arg
115      120      125
Arg Leu Thr Glu Ser Tyr Cys Glu Thr Trp Arg Thr Glu Ala Pro Ser
130      135      140
Ala Thr Gly Gln Ala Ser Ser Leu Leu Gly Gly Arg Leu Leu Gly Gln
145      150      155      160
Ser Ala Ala Ser Cys His His Ala Tyr Ile Val Leu Cys Ile Glu Asn
165      170      175
Ser Phe Met Thr Ala Ser Lys
180

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<210> 2

<211> 551

<212> DNA

<213> Human

<400> 2

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ggctggcggg caccttccgc gccttctctgt cctcgcgcct gcaggacctg tacagcatcg      180
tgcgccgtgc cgaccgcgca gccgtgccca tcgtcaacct caaggacgag ctgctgtttc      240
ccagctggga ggctctgttc tcaggctctg aggttccgct gaagcccggg gcacgcacatc      300

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tctcctttga cggcaaggac gtcttgaggc accccacctg gccccagaag agcgtgtggc      360
atggctcgga ccccaacggg cgcaggctga ccgagagcta ctgtgagacg tggcggacgg      420
aggctccctc ggccacgggc caggcctcct cgctgctggg gggcaggctc ctggggcaga      480
gtgccgcgag ctgccatcac gcctacatcg tgctctgcat tgagaacagc ttcagtactg      540
cctccaagta g                                     551

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<210> 3

<211> 207
 <212> PRT
 <213> Mouse

<400> 3
 Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro
 1 5 10 15
 Gly Ser Thr Gly Asp Ala Ala His Thr His Gln Asp Phe Gln Pro Val
 20 25 30
 Leu His Leu Val Ala Leu Asn Thr Pro Leu Ser Gly Gly Met Arg Gly
 35 40 45
 Ile Arg Gly Ala Asp Phe Gln Cys Phe Gln Gln Ala Arg Ala Val Gly
 50 55 60
 Leu Ser Gly Thr Phe Arg Ala Phe Leu Ser Ser Arg Leu Gln Asp Leu
 65 70 75 80
 Tyr Ser Ile Val Arg Arg Ala Asp Arg Gly Ser Val Pro Ile Val Asn
 85 90 95
 Leu Lys Asp Glu Val Leu Ser Pro Ser Trp Asp Ser Leu Phe Ser Gly
 100 105 110
 Ser Gln Gly Gln Leu Gln Pro Gly Ala Arg Ile Phe Ser Phe Asp Gly
 115 120 125
 Arg Asp Val Leu Arg His Pro Ala Trp Pro Gln Lys Ser Val Trp His
 130 135 140
 Gly Ser Asp Pro Ser Gly Arg Arg Leu Met Glu Ser Tyr Cys Glu Thr
 145 150 155 160
 Trp Arg Thr Glu Thr Thr Gly Ala Thr Gly Gln Ala Ser Ser Leu Leu
 165 170 175
 Ser Gly Arg Leu Leu Glu Gln Lys Ala Ala Ser Cys His Asn Ser Tyr
 180 185 190
 Ile Val Leu Cys Ile Glu Asn Ser Phe Met Thr Ser Phe Ser Lys
 195 200 205

<210> 4
 <211> 624
 <212> DNA
 <213> Mouse

<400> 4
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 cccctgtctg gaggcattgcg tggatatcgt ggagcagatt tccagtgtct ccagcaagcc 180
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 gtgctatctc ccagctggga ctccctgttt tctggctccc aggggtcaagt gcaaccggg 360
 gcccgcatct tttcttttga cggcagagat gtcttgagac acccagcctg gccgcagaag 420
 agcgtatggc acggctcggg cccagtgagg cggaggctga tggagagtta ctgtgagaca 480
 tggcgaactg aaactactgg ggctacaggt caggcctcct ccctgctgtc aggcaggctc 540
 ctggaacaga aagctgcgag ctgccacaac agctacatcg tcctgtgcat tgagaatagc 600
 ttcattgacct ctttctccaa atag 624

<210> 5

<211> 8
 <212> PRT
 <213> Human

<400> 5
 Ala Pro Gln Gln Glu Ala Leu Ala
 1 5

<210> 6

<211> 38
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 6
actggtgacg cggcccatatc tcatcaggac tttcagcc 38

<210> 7
<211> 32
<212> DNA
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<220>
<223> PCR Primer

<400> 7
aagggtatc gatctagctg gcagaggcct at 32

<210> 8
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 8
cactgcttac tggcttatcg 20

<210> 9
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 9
ctgatgagta tgggccgcgt caccagtgg 29

<210> 10
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 10
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<210> 11
<211> 35
<212> DNA
<213> Artificial Sequence

<220>

<223> PCR Primer

<400> 11

gatctctaga ccaccatgca tactcatcag gactt

35

<210> 12

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR Primer

<400> 12

actggagaaa gaggtttatc tagctactag

30

<210> 13

<211> 18

<212> PRT

<213> Adenovirus

<400> 13

Met Arg Tyr Met Ile Leu Gly Leu Leu Ala Leu Ala Ala Val Cys Ser

1

5

10

15

Ala Ala

<210> 14

<211> 96

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<213> Artificial Sequence

<220>

<223> PCR Primer

<400> 14

gatctctaga ccaccatgag gtacatgatt ttaggcttgc tcgcccttgc ggcagtcctgc
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60

96

<210> 15

<211> 29

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR Primer

<400> 15

atcgatcata ctcatcagga ctttcagcc

29

<210> 16

<211> 29

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR Primer

<400> 16

gcggccgcct atttggagaa agaggatcat

29

<210> 17

<211> 23
<212> DNA
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<220>
<223> PCR Primer

<400> 17
tttttttttc agtgtaaaag gtc

23

<210> 18
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 18
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19

<210> 19
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 19
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22

<210> 20
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<212> DNA
<213> Artificial Sequence

<220>
<223> PCR Primer

<400> 20
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cagccctca gcaagaagcg ctgctcaca gccaccgca cttccagccg gtgctcca 118

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<213> Artificial Sequence

<220>
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ctgccagagc cctcccggcc aggcaaagga gaaagaagat ccaggccctc atggaagctt 120
ggc 123